5 new industrial clusters from India joins Transitioning Industrial Clusters initiative (TICI)

These include Gopalpur Industrial Park, Kakinada Cluster, Kerala Green Hydrogen Valley, Mundra Cluster & Mumbai Green Hydrogen Cluster.

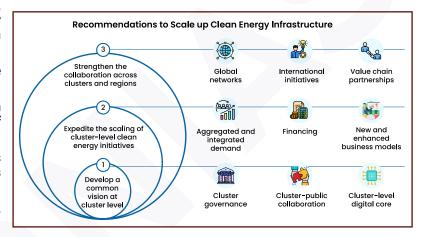
- > Industrial clusters are geographically concentrated areas or hubs where interconnected industries, companies and institutions collaborate to drive economic growth.
- A report released by WEF showcases the role of industrial clusters in providing economies of scale, shared risk & demand optimisation. Moreover, they offer unique benefits driven by local context, location and makeup of its members.

Challenges inhibiting Clean Infrastructure **Energy Development**

- Green premium issue: E.g. Green ammonia production costs are nearly three times the average cost of production via fossil fuels in 2023.
- Fragmentation of standards, certifications and policies for clean fuels: E.g: There are 34 certification schemes for hydrogen and its derivatives (e.g. ammonia) globally.
- Others: Lack of strong demand, Gaps in governance, data protocols and controls.

What is the Transitioning Industrial Clusters initiative?

- It is an World Economic Forum's initiative which was first launched at UNFCCC's COP26 (Glasgow, UK, 2021)
- It presently comprises 33 clusters in 16 countries and five continents.
- It is the largest coalition of co-located companies and public institutions pledging to reduce their greenhouse gas (GHG) emissions while boosting economic growth and job creation.



Ministry of Tribal Affairs hosts National Conference of District Magistrates on PM JANMAN

It aims to accelerate implementation of the scheme by sharing best practices in districts with a focus on rural development, PVTG hostels (schools), drinking water etc.

About PM JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan)

- ➤ Launched: on Janjatiya Gaurav Divas (15th November 2023)
- Focus Areas & Ministries: 11 critical interventions through 9 line Ministries/Departments
- Objective: bridge developmental gaps in tribal areas by construction of pucca houses, deployment of mobile medical units, establishment of health and wellness centres, setting up Van Dhan Vikas Kendras etc.
- Budget Allocation: ~₹24,000 crore for three years (2023-24 to 2025-26).
- Coverage: under the Development Action Plan for Scheduled Tribes (DAPST)

Challenges faced by PVTGs

- Structural discrimination: PVTGs are often perceived as "primitive," and are labelled as "hostile"
- Land alienation: PVTGs often lose land and forest resources and are forced into bonded labor. Improper implementation of Forest Rights Act (2006) leaves many without land rights.
- ▶ Health issues: PVTGs face high infant and maternal mortality, malnutrition, and anemia.
- Education barriers: Education systems are disconnected from their cultural knowledge.

Initiatives taken

- Article 275(1) of the Constitution: It guarantees grants-in-aid from the Consolidated Fund of India each year for promoting the welfare of Scheduled Tribes.
- Pradhan Mantri Janjatiya Unnat Gram Abhiyan (PM-JUGA): To improve socio-economic conditions in selected tribal-majority villages

About PVTGs

- They are amongst most marginalized and vulnerable sections among tribal communities
- There are 75 identified PVTGs in 18 States, and Union Territory of Andaman & Nicobar Islands,
- Criteria for identification includes:-
 - Pre-agricultural level of technology
 - Low level of literacy
 - Economic backwardness
 - A declining or stagnant population.

Pradhan Mantri Adi Adarsh Gram Yojana (PMAAGY): To transform villages with significant tribal population into model villages







India soon to launch first Human Underwater Submersible (Deep-Sea Manned Vehicle): Union Minister

Initial submersible will operate at a depth of up to 500 meters, with a subsequent goal of reaching a staggering depth of 6,000 meters under the Deep Ocean Mission (DOM).

Earlier, India launched its first and unique Manned Ocean Mission Samudrayan at Chennai for deep ocean explorations.

Deep Ocean Mission (DOM)

- ➤ About: Flagship program launched in 2021 for a period of five years.
- Nodal Ministry: Ministry of Earth Sciences.
 - Deep Ocean Exploration is also among the nine missions under the Prime Minister's Science, Technology, and Innovation Advisory Council (PMSTIAC).
- Aim: Unlock vast resources, including critical minerals, rare metals, and undiscovered marine biodiversity.

Key Pillars of the Mission

- ➤ Developing technologies for deep-sea mining and a manned submersible (equipped with sensors, tools to mine polymetallic nodules) to carry 3 people to a depth of 6,000 metres in the Indian ocean.
- ▶ Development of ocean climate change advisory services, involving an array of ocean observations and models.
- Technological innovations for exploration and conservation of deepsea biodiversity.
- Deep-ocean survey and exploration for identifying potential sites of multi-metal hydrothermal sulphides mineralisation along the Indian Ocean mid-oceanic ridges.
- Harnessing energy and freshwater from the ocean.
- Establishing an advanced Marine Station for Ocean Biology, for driving new opportunities in ocean biology and blue biotechnology.

Tapping India's vast coastal resources Strategic **Benefits of** Indigenous India'sDeep **Blue Economy** Technology Ocean Mission Enhancement Utilization **Positions India** among a select group of nations in Ocean Exploration

Navigating Global Financial System Fragmentation Report released by World Economic Forum (WEF)

The report calls for an integrated financial system and suggests broad principles to policymakers for promoting integration.

What is Fragmentation of Global Financial Systems (GFS)?

- ▶ Meaning: It can be understood as the degree of differences that exists across jurisdictions in the prices of economically identical (or similar) assets, or in the free movement of capital across borders, etc.
 - It causes increased tariffs, economic sanctions and export controls hampering cross-border investments.

Recent trends on Fragmentation of GFS

- **Economic Statecraft:** Use of **economic tools and policies** by a state to achieve its **foreign-policy and domestic objectives**. Example, Use of Sanctions, quotas, etc.
- ➤ Rising Multipolarity: Marked by declining dollar's share in global reserves from 71% (1999) to 58% (2024).

Geopolitical Events: COVID-19 shock and subsequent supply-chain disruptions, industrial policies to increase the resilience of domestic economies, E.g., Made in China, 2025, etc.

➤ Weakening global governance: Since 2019, the WTO Appellate Body has been unable to issue decisions, accelerating the formation of regional trading blocs.

Issues with Fragmented GFS

- ➤ Macroeconomic: It can negatively impact global output losing about 5% of global gross domestic product (GDP) in the short term.
- Impact on Emerging Markets and Developing Economies: Without access to capital and investment, they may seek financial support outside the international rules-based system.
- Impact on Financial Institutions: Reduces their ability to facilitate financial intermediation along with subjecting them to credit, currency and insolvency risks, etc.

Promoting Global Financial System Integration



Institutional Arrangements like Formation of World Trade Organisation



Financial Deregulation



Technological Role like use of Real Time Gross Settlement

Key recommendations on Promoting GFS Integration

- Upholding Rule of Law, respecting property and financial ownership rights, etc.
- Standardize the regulation of cross-border capital, services, goods and data flows.
- Use regular stress-testing to highlight the negative externalities of financial fragmentation.







7 new members joins World Economic Forum's (WEF) Global Plastic Action Partnership (GPAP)

New members include Angola, Bangladesh, Gabon, Guatemala, Kenya, Senegal & Tanzania.

About Global Plastic Action Partnership

- Launched: during WEF's Sustainable Development Impact Summit in 2018
 - It acts as a plastic pillar of the Platform for Accelerating the Circular Economy and Friends of Ocean Action.
- Present members: 25 (including Maharashtra State from
- Objectives: accelerate global response to plastic pollution crisis (by bringing together governments, businesses, civil society), advance circular plastics economy to reduce emissions & protect land and ocean ecosystems.
- Key activities: Helps countries in developing National Action Roadmaps & Investment Mobilization for waste management

Challenges related to handling of Global Plastic Waste

- Scalability: Globally, plastic waste has more than doubled since 2000. (OECD's Global Plastic Outlook Report ,2022).
- **Limited Recycling:** Only 9% of plastic waste was ultimately recycled, while 19% was incinerated and almost 50% went to sanitary landfills.

Impact of Plastic Waste

- On Environment: It affects all land, freshwater, and marine ecosystems. It leads to biodiversity loss, ecosystem degradation and contributes to climate change.
 - → Plastic pollution is responsible for an estimated 1.8 billion tonnes of greenhouse gas emissions annually, especially Methane from landfills.
- On Health: Plastics in the form of microplastics damages animal and human health by entering the food chain.
- On Economy: leads to decline in income of sectors such as tourism, fisheries, agriculture, and water safety.

India's Initiatives for Plastic Waste Management

- Plastic Waste Management Rules, 2016: It leads to Extended Producer Responsibility (EPR) to reduce plastic footprint by promoting recycling of plastic materials.
- National Circular Economy Roadmap for reduction of Plastic waste in India was launched in 2023 in collaboration with Australia.

India welcomes the decision on the competence of the Neutral Expert to address issues regarding

Indus Water Treaty (IWT) (1960), brokered by World Bank, was signed between India and Pakistan to determine the distribution of the waters of River Indus and its tributaries.

Key Provisions of the Treaty

- Allocation: Treaty allocates three Eastern Rivers (Beas, Ravi, Sutlej) to India, and three Western Rivers (Indus, Chenab, Jhelum) to Pakistan.
 - ⊕ It allows each country certain uses on the rivers allocated to the other.
 - power facilities on Western rivers subject to constraints including **design specifications** provided in the Treaty.
- Settlement of Differences and Disputes: It provides for a graded three-level dispute settlement mechanism:
 - negotiation.
 - Neutral Expert: Appointed by the World Bank to address technical disagreements.
 - Court of Arbitration (PCA): At higher level to resolve issues that cannot be solved through earlier steps.

Present Dispute

Background: It deals with the design features of the Kishenganga (330 MW) (850MW) and Ratle hydroelectric power plants, located in India on tributaries of Jhelum and Chenab respectively.

Opposing Views: ln 2016, Pakistan proposed adjudication by Court of Arbitration, while India prefers adjudication by the **Neutral Expert.**

Indus River System CHINA Kishanganga Dam Indus Ratle Dam CHINA Ravi Jhelum Beas Chenab Sutlei PAKISTAN INDIA

Significance of the IWT

- Political: Example of successful third-party mediation and conflict prevention with around 65 years of its existence.
- Economic: Maximise water availability and spur development through cooperation and technology infusion.
- Ecological: Deal with emerging challenges like Climate Change, Water Scarcity, etc.

Also in News



Enemy Property

Recently, the Madhya Pradesh High Court has asked the petitioner to approach the appellate authority in a case related to "enemy property". **About Enemy Property**

- It is regulated under Enemy Property Act, 1968.
 - The 1968 Act defined an 'enemy' as a country (and its citizens) that committed external aggression against India (i.e., Pakistan and China).
 - Enemy Property means any property for the time being belonging to or held or managed on behalf of an enemy, an enemy subject or an enemy firm.
 - The 2017 amendment to the act expanded the definition of enemy to include:
 - Legal heir or successor of enemy whether or not citizen of India or the citizen of a country which is not an enemy.
 - Enemy who has changed his nationality.



Global Investment Trends Monitor Report

The Global Investment Trends Monitor report was released recently.

It has been released by United Nations Conference on Trade and Development(UNCTAD)

Key highlights

- Overall, Global Foreign Direct Investments rose 11% to \$1.4 trillion in 2024
 - However, it fell 8% when excluding flows through European conduit economies, which often serve as transfer points before investment flows reach their final destination.
- FDI to developing countries declined 2%, marking a second consecutive annual fall for the Global South.
- Investments in SDG-related sectors dropped 11% globally in 2024
- India saw a 13% rise in FDI and growth in greenfield project announcements.









Ad Hoc Judge

Supreme Court (SC) proposed temporarily appointing retired judges on an ad hoc basis to clear backlog of criminal cases in High Courts (HC).

About Ad Hoc Judge

- Constitution: Article 224A states that the Chief Justice of a HC may, with the previous consent of the President, request any person who has held the office of a Judge of a HC to act as a Judge of the HC.
- Procedure for appointment: Outlined in 1998 Memorandum of Procedure (MOP)

NOTE: Article 127 deals with the appointment of ad hoc Judges in SC if the quorum is not met.



Indian Cybercrime Coordination Centre

Recently, the Union Finance Minister asked banks to complete Indian Cybercrime Coordination Centre (I4C) integration to check financial frauds.

After the integration, any complaint on financial fraud will be routed to the concerned bank for speedy remedial action.

About Indian Cybercrime Coordination Centre

- Ministry: Ministry of Home Affairs
- Objectives:
 - Serve as a central hub to combat cybercrime, particularly against women and children, by simplifying complaint filing and trend
 - enforcement while enhancing public awareness.
 - Support capacity building for police, prosecutors, and judicial officers in cyber-related fields.



Airport Economic Regulatory Authority

Recently, Parliament's Public Accounts Committee asked the Airport Economic Regulatory Authority (AERA) to submit details regarding user development fees charged by airport operators across the country.

- **Establishment: Statutory body under Airports Economic Regulatory** Authority of India Act, 2008.
- **Functions:**
 - Tariff determination for aeronautical services: It considers capital expenditure, efficiency costs, economic viability, government concessions etc
 - Sets development fees and passengers' service fees under the Aircraft Rules, 1937.
 - Ensures quality, continuity, and reliability of airport services.
 - Performs other tasks assigned by the central government or necessary tariff-related duties.



Supermassive Black Hole

Recently, NASA discovered a unique black hole (LID-568), revealing insights into supermassive black hole.

LID-568 is a low-mass supermassive black hole that existed 1.5 billion years after the Big Bang.

About Supermassive Black Holes

- Most common types of black holes with intense gravity causing stars to orbit around it in a particular way.
 - Black holes are cosmic objects having huge concentrations of matter packed into very tiny spaces.
- Eddington limit: Governs the rate at which a black hole feeds on
 - Once, the limit is crossed, it is called super-Eddington accretion.
 - LID-568 lies here.



Indian National Centre for Ocean Information Services (INCOIS)

Recently, INCOIS, Hyderabad was selected for Subhash Chandra Bose Aapda Prabandhan Puraskar-2025.

Annual award announced on the birth anniversary (23rd January) of Netaji Subhash Chandra Bose honouring individuals and organizations for their contributions to disaster management in India.

About INCOIS

- Genesis: Established in 1999 under the Ministry of Earth Sciences (MoES) and is a unit of the Earth System Science Organisation (ESSO).
 - Permanent member of UNESCO's Intergovernmental Oceanographic Commission (IOC).
- **Key Functions**
 - Provides vital ocean-related information and advisory services.
 - Issues warnings for tsunamis, storm surges, high waves, etc., through the Indian Tsunami Early Warning Centre (ITEWC).



Lake Naivasha

Invasive water hyacinth threatens fishers' livelihoods on Lake Naivasha About Lake Naivasha (Kenya)

- It is a shallow freshwater lake in the southern Rift Valley, surrounded by acacia woodlands.
- It is fed by the perennial Malewa and Gilgil Rivers, which drain the Aberdare Mountains of central Kenya
- The lake remains fresh despite no outlet, mainly due to underground seepage and salt sedimentation in the eastern Rift Valley.
- It is listed as a wetland under the Ramsar Site.



Vaigai River

Recently, Madurai Bench of the Madras High Court directed local bodies to create an action plan for rejuvenating the Vaigai River.

About Vaigai River

- Origin: Eastern slope of the Western Ghat mountainous offshoot in the Varushanad area.
 - Arcuate Shaped basin surrounded by Cauvery and Pambar Kottakaraiyar basins (North), Gundar basin (South), Periyar basin (West) Bay of Bengal (East).
- Major Tributaries: Varattar, Nagalar, Varahanadhi, Manjalar, Marudhanadhi, Sirumaliar, Sathaiyar
- Flows through: Theni, Dindugal, Madurai, Sivaganga, and Ramanathapuram Districts of Tamil Nadu.
- Drains: Empties into Palk Bay.



Kashmir Chinars

Recently, Kashmir Chinars got digital protection through geo-tagging with QR-code.

About Kashmir Chinars (Platanus orientalis)

- Native: Originated in Greece, found throughout Kashmir, grows characteristically in Eastern Himalayas.
 - Char Chinar, an Island on the Dal Lake, Srinagar is named after it.
- Key Features
 - Large and deciduous, growing up to 30 meters tall, takes about 150 years to reach to full height.
 - green (summer), blood-red, amber and yellow (autumn).
 - Applications: Used for medicinal purposes, wood for interior furniture, and making dyes, etc.



























AHMEDABAD

BENGALURU

BHOPAL

CHANDIGARH

DELHI

GUWAHATI

HYDERABAD

JODHPUR

LUCKNOW

PRAYAGRAJ

PUNE